```
UUU           UUU   EEEEEEEEEEEEEEE   TTTTTTTTTTTTTTT   PPPPPPPPPPPP        SSSSSSSSSSSS   YYY               YYY
UUU           UUU   EEEEEEEEEEEEEEE   TTTTTTTTTTTTTTT   PPPPPPPPPPPP        SSSSSSSSSSSS   YYY               YYY
UUU           UUU   EEEEEEEEEEEEEEE   TTTTTTTTTTTTTTT   PPPPPPPPPPPP        SSSSSSSSSSSS   YYY               YYY
UUU           UUU   EEE                       TTT       PPP         PPP     SSS            YYY               YYY
UUU           UUU   EEE                       TTT       PPP         PPP     SSS            YYY               YYY
UUU           UUU   EEE                       TTT       PPP         PPP     SSS            YYY               YYY
UUU           UUU   EEE                       TTT       PPP         PPP     SSS               YYY         YYY
UUU           UUU   EEE                       TTT       PPP         PPP     SSS               YYY         YYY
UUU           UUU   EEE                       TTT       PPP         PPP     SSS               YYY         YYY
UUU           UUU   EEEEEEEEEEE               TTT       PPPPPPPPPPPP              SSSSSSSSS        YYY
UUU           UUU   EEEEEEEEEEE               TTT       PPPPPPPPPPPP              SSSSSSSSS        YYY
UUU           UUU   EEEEEEEEEEE               TTT       PPPPPPPPPPPP              SSSSSSSSS        YYY
UUU           UUU   EEE                       TTT       PPP                             SSS        YYY
UUU           UUU   EEE                       TTT       PPP                             SSS        YYY
UUU           UUU   EEE                       TTT       PPP                             SSS        YYY
UUU           UUU   EEE                       TTT       PPP                             SSS        YYY
UUU           UUU   EEE                       TTT       PPP                             SSS        YYY
UUU           UUU   EEE                       TTT       PPP                             SSS        YYY
UUUUUUUUUUUUUUUUU   EEEEEEEEEEEEEEE           TTT       PPP                SSSSSSSSSSSS           YYY
UUUUUUUUUUUUUUUUU   EEEEEEEEEEEEEEE           TTT       PPP                SSSSSSSSSSSS           YYY
UUUUUUUUUUUUUUUUU   EEEEEEEEEEEEEEE           TTT       PPP                SSSSSSSSSSSS           YYY
```

```
SS3SSSSS    AAAAAA    TTTTTTTTTT   SSSSSSSS    SSSSSSS    SSSSSSSS  44    44   5555555555
SSSSSSSS    AAAAAA    TTTTTTTTTT   SSSSSSSS    SSSSSSS    SSSSSSSS  44    44   5555555555
SS          AA    AA      TT       SS          SS         SS        44    44   55
SS          AA    AA      TT       SS          SS         SS        44    44   555555
SS          AA    AA      TT       SS          SS         SS        44    44   555555
SS          AA    AA      TT       SS          SS         SS        44    44
SSSSSS      AA    AA      TT       SSSSSS       SSSSSS     SSSSSS    444444444        55
SSSSSS      AA    AA      TT       SSSSSS       SSSSSS     SSSSSS    444444444        55
        SS  AAAAAAAAAA    TT             SS          SS         SS   44              55
        SS  AAAAAAAAAA    TT             SS          SS         SS   44   55         55
        SS  AA    AA      TT             SS          SS         SS   44   55    55    ....
        SS  AA    AA      TT             SS          SS         SS   44   55    55    ....
SSSSSSSS    AA    AA      TT       SSSSSSSS    SSSSSSSS   SSSSSSSS   44        555555  ....
SSSSSSSS    AA    AA      TT       SSSSSSSS    SSSSSSSS   SSSSSSSS   44        555555  ....


LL              IIIIII    SSSSSSSS
LL              IIIIII    SSSSSSSS
LL                II            SS
LL                II            SS
LL                II            SS
LL                II            SS
LL                II      SSSSSS
LL                II      SSSSSS
LL                II            SS
LL                II            SS
LL                II            SS
LL                II            SS
LLLLLLLLLL      IIIIII    SSSSSSSS
LLLLLLLLLL      IIIIII    SSSSSSSS
```

SATSSS45
V04-000

L 9
SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25 VAX/VMS Macro V04-00   Page 1
                                        5-SEP-1984 04:31:42 [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
0000      1                .TITLE  SATSSS45 SATS SYSTEM SERVICE TESTS  $SETPRI (SUCC S.C.)
0000      2                .IDENT  'V04-000'
0000      3
0000      4
0000      5        ;*********************************************************************
0000      6        ;*                                                                   *
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0000     24        ;*                                                                   *
0000     25        ;*                                                                   *
0000     26        ;*********************************************************************
0000     27        ;
0000     28        ;
0000     29        ;++
0000     30        ; FACILITY:     SYSTST (SATS SYSTEM SERVICE TESTS)
0000     31        ;
0000     32        ; ABSTRACT:
0000     33        ;
0000     34        ;               THIS MODULE CONTAINS SUBROUTINES WHICH, WHEN LINKED
0000     35        ; WITH SUCCOMMON.OBJ, FORM TEST MODULE SATSSS45 TO TEST SUCCESSFUL
0000     36        ; OPERATION OF THE $SETPRI SYSTEM SERVICE. THE SERVICE IS INVOKED
0000     37        ; UNDER VARIOUS INPUT CONDITIONS WITH VARYING INPUT PARAMETERS. ONLY
0000     38        ; SUCCESSFUL STATUS CODES ARE EXPECTED IN THIS TEST MODULE.  CORRECT
0000     39        ; OPERATION OF THE SERVICE FOR EACH OF ITS ISSUANCES IS VERIFIED BY
0000     40        ; CHECKING FOR AN SS$ NORMAL STATUS CODE, EXPECTED RETURN ARGUMENTS
0000     41        ; AND EXPECTED FUNCTIONALITY PERFORMED.
0000     42        ;
0000     43        ; ENVIRONMENT: USER MODE IMAGE; NEEDS CMKRNL PRIVILEGE.
0000     44        ;              DYNAMICALLY ACQUIRES OTHER PRIVILEGES, AS NEEDED.
0000     45        ;
0000     46        ; AUTHOR: THOMAS L. CAFARELLA,          CREATION DATE: NOV, 1977
0000     47        ;
0000     48        ; MODIFIED BY:
0000     49        ;
0000     50        ;               VERSION 1.5 : 25-MAY-79
0000     51        ;
0000     52        ; 01  LDJ  10/11/79    Fixed bug caused by DIB$K_LENGTH change ACG052.RNO mem
0000     53        ;
0000     54        ;--
```

M 9

SATSSS45   SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25 VAX/VMS Macro V04-00   Page 2
V04-000   DECLARATIONS   5-SEP-1984 04:31:42 [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
0000    56              .SBTTL  DECLARATIONS
0000    57 ;
0000    58 ; INCLUDE FILES:
0000    59 ;
0000    60         $PRVDEF                      ; PRIVILEGE BIT DEFINITIONS
0000    61         $PHDDEF                      ; PROCESS HEADER OFFSETS
0000    62         $PQLDEF                      ; PROCESS QUOTA CODES
0000    63         $PCBDEF                      ; PCB LABELS
0000    64         $DIBDEF                      ; DEVICE INFO BLOCK OFFSETS
0000    65 ;
0000    66 ; MACROS:
0000    67 ;
0000    68 ;
0000    69 ; EQUATED SYMBOLS:
0000    70 ;
0000    71 ;
0000    72 ; OWN STORAGE:
0000    73 ;
```

N 9

SATSSS45   SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25 VAX/VMS Macro V04-00   Page 3
V04-000   DECLARATIONS   5-SEP-1984 04:31:42 [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
00000000    75             .PSECT  RODATA,RD,NOWRT,NOEXE,LONG
    0000    76  TEST_MOD_NAME:: STRING  C,<SATSSS45>        ; TEST MODULE NAME
    0009    77  TEST_MOD_NAME_D: STRING I,<SATSSS45>        ; TEST MODULE NAME DESCRIPTOR
    0019    78  MSG1_INP_CTL:-  STRING  I,< SSSPR!4ZW: CONDITIONS:>
    0039    79                                             ; FAO CTL STRING FOR MSG1 IN SUCCOMMON.MAR
    0039    80  MSG3_ERR_CTL::  STRING  I,< *SSSPR!4ZW: !AS>
    0051    81                                             ; FAO CTL STRING FOR MSG3 IN SUCCOMMON.MAR
    0051    82  SUBJPRN:        STRING  I,<SATSSS45 CRE>  ; PROCESS & MBX NAME FOR CREATED PROCESS
    0065    83  IMAGNAM:        STRING  I,<SYSTST$RES:SATSUT08.EXE> ; IMAGE NAME FOR CREATED PROC
    0084    84  QUOTALIST:      $QUOTA  CPULM,0             ; INFINITE CPU
    0089    85                  $QUOTA  BYTLM,512           ; BYTE LIMIT FOR BUFFERED I/O
    008E    86                  $QUOTA  FILLM,2             ; OPEN FILE COUNT LIMIT
    0093    87                  $QUOTA  PGFLQUOTA,10        ; PAGING FILE QUOTA
    0098    88                  $QUOTA  PRCLM,2             ; SUBPROCESS QUOTA
    0C9D    89                  $QUOTA  TQELM,3             ; TIMER QUEUE ENTRY QUOTA
    00A2    90                  $QUOTA  LISTEND             ; DEFINES END OF LIST
```

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V04-000

B 10

SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25 VAX/VMS Macro V04-00   Page 4
DECLARATIONS   5-SEP-1984 04:31:42 [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
         00000000    92              .PSECT  RWDATA,RD,WRT,NOEXE,LONG
00000008  0000       93 PRIVMASK:    .BLKQ   1                       ; ADDR OF PRIVILEGE MASK (IN PHD)
0000000C  0008       94 MBXCHAN:     .BLKL   1                       ; CHAN. NO. FOR MAILBOX FOR CREATED PROCESS
          000C       95 MBXCHANINFO:                                 ; CHANNEL INFO RETURNED BY GETCHN
00000074. 000C       96              .LONG   DIB$K_LENGTH
00000014' 0010       97              .ADDRESS .+4
00000088  0014       98              .BLKB   DIB$K_LENGTH
0000008C  0088       99 MBXUNIT:     .BLKL   1                       ; SAVE AREA FOR MAILBOX UNIT NUMBER
          008C      100 MBXBUFF:     STRING  0,120                   ; MAILBOX BUFFER FOR CREATED PROCESS
00000110  010C      101 DEST_PIDADR: .BLKL   1                       ; DESTINATION PID ADDR, WRITTEN BY S.S.
00000114  0110      102 ZEROPID:     .BLKL   1                       ; PID OF ZEROES
00000000  0114      103 SELFPID:     .LONG   0                       ; PID OF THIS PROCESS
0000011C  0118      104 CREPID:      .BLKL   1                       ; PID OF CREATED PROCESS
00000120  011C      105 SUBJPID:     .BLKL   1                       ; PID OF SUBJECT PROCESS (SELF OR OTHER)
      FF  0120      106 ORIGPRI:     .BYTE   -1                      ; ORIGINAL PRIORITY OF SUBJECT PROCESS
00 00 00  0121      107              .BYTE   0,0,0                   ; NEED HI-ORDER 0'S WHEN ...
          0124      108                                              ; ... ORIGPRI USED AS LONGWORD
00000125  0124      109 ESTPRI:      .BLKB   1                       ; PRIORITY ESTABLISHED BEFORE ...
          0125      110                                              ; ... SUBJECT SETPRI CHANGED IT
```

C 10

SATSSS45   SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25   VAX/VMS Macro V04-00   Page 5
V04-000   CONDITION TABLES   5-SEP-1984 04:31:42 [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
                    0125   112            .SBTTL   CONDITION TABLES
                    0125   113  ;
                    0125   114  ;     ***** CONDITION TABLES FOR SETPRI SYSTEM SERVICE *****
                    0125   115  ;;
                    0125   116  ;     COND     1,NOTARG,<PID ADDRESS>,-
                    0125   117                  <NOT SPECIFIED>,-
                    0125   118                  <SPECIFIED, NON-ZERO>,-
                    0125   119                  <SPECIFIED, ZERO>,-
                    0125   120
      00000000' 0170   121                  .ADDRESS    0
      0000011C' 0174   122                  .ADDRESS    SUBJPID
      00000110' 0178   123                  .ADDRESS    ZEROPID
                    017C   124  ;
                    017C   125       COND     2,NOTARG,<PROCESS NAME ADDRESS>,-
                    017C   126                  <SPECIFIED>,-
                    017C   127                  <NOT SPECIFIED>,-
                    017C   128
      00000051' 01B2   129                  .ADDRESS    SUBJPRN
      00000000' 01B6   130                  .ADDRESS    0
                    01BA   131  ;
                    01BA   132       COND     3,NOTARG,<PROCESS TYPE>,-
                    01BA   133                  <SELF>,-
                    01BA   134                  <SUBPROCESS>,-
                    01BA   135                  <DETACHED, DIFFERENT GROUP>,-
                    01BA   136                  <DETACHED, SAME GROUP, SAME MEMBER>,-
                    01BA   137                  <DETACHED, SAME GROUP, DIFFERENT MEMBER>,-
                    01BA   138
      FFFFFFFF 024F   139                  .LONG       ^XFFFFFFFF ; PSEUDO-UIC
      00000000 0253   140                  .LONG       0          ; PSEUDO-UIC
      0000025B 0257   141                  .BLKL       1          ; UIC
      0000025F 025B   142                  .BLKL       1          ; UIC
      00000263 025F   143                  .BLKL       1          ; UIC
                    0263   144  ;
                    0263   145       COND     4,NULL
                    0264   146
                    0264   147       COND     5,NULL
                    0265   148
      00000000   149            .PSECT   SATSSS45,RD,WRT,EXE
```

SATSSS45
V04-000

D 10
SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25 VAX/VMS Macro V04-00   Page   6
TM_SETUP, TM_CLEANUP   5-SEP-1984 04:31:42 [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
                    0000    151              .SBTTL  TM_SETUP, TM_CLEANUP
                    0000    152 ;++
                    0000    153 ; FUNCTIONAL DESCRIPTION:
                    0000    154 ;
                    0000    155 ;            TM_SETUP AND TM_CLEANUP ARE CALLED TO PERFORM
                    0000    156 ; REQUIRED HOUSEKEEPING AT THE BEGINNING AND END, RESPECTIVELY, OF
                    0000    157 ; TEST MODULE EXECUTION.
                    0000    158 ;
                    0000    159 ; CALLING SEQUENCE:
                    0000    160 ;
                    0000    161 ;     BSBW TM_SETUP    BSBW TM_CLEANUP
                    0000    162 ;
                    0000    163 ; INPUT PARAMETERS:
                    0000    164 ;
                    0000    165 ;     NONE
                    0000    166 ;
                    0000    167 ; IMPLICIT INPUTS:
                    0000    168 ;
                    0000    169 ;     NONE
                    0000    170 ;
                    0000    171 ; OUTPUT PARAMETERS:
                    0000    172 ;
                    0000    173 ;     NONE
                    0000    174 ;
                    0000    175 ; IMPLICIT OUTPUTS:
                    0000    176 ;
                    0000    177 ;     TM_SETUP:  COND TABLE INDEX REGISTERS (R2,3,4,5,6) CLEARED;
                    0000    178 ;                ALL PRIVILEGES ACQUIRED.
                    0000    179 ;
                    0000    180 ; COMPLETION CODES:
                    0000    181 ;
                    0000    182 ;     EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
                    0000    183 ;
                    0000    184 ; SIDE EFFECTS:
                    0000    185 ;
                    0000    186 ;     SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
                    0000    187 ;     (VIA RSB) IF ERROR ENCOUNTERED.
                    0000    188 ;
                    0000    189 ;--
                    0000    190
                    0000    191
                    0000    192
                    0000    193 TM_SETUP::
            52  D4  0000    194              CLRL    R2                          ; INITIALIZE
            53  D4  0002    195              CLRL    R3                          ; .. CONDITION
            54  D4  0004    196              CLRL    R4                          ; .... TABLE
            55  D4  0006    197              CLRL    R5                          ; ...... INDEX
            56  D4  0008    198              CLRL    R6                          ; ........ REGISTERS
         FFF3'  30  000A    199              BSBW    MOD_MSG_PRINT               ; PRINT TEST MODULE BEGIN MSG
00000000'EF  00000000'EF  DE  000D  200      MOVAL   TEST_MOD_SUCC,TMD_ADDR      ; ASSUME END MSG WILL SHOW SUCCESS
  03  00  00000000'8F  F0  0018  201         INSV    #SUCCESS,#0,#3,MOD_MSG_CODE ; ADJUST STATUS CODE FOR SUCCESS
           00000000'EF      0020
                    0025    202              MODE    TO,5$,KRNL                  ; KERNEL MODE TO ACCESS PHD
      59  00000000'9F  DO  0048  203         MOVL    @#CTL$GL_PHD,R9             ; GET PROCESS HEADER ADDRESS
      00000000'EF  69  DE  004F  204         MOVAL   PHD$Q_PRIVMSK(R9),PRIVMASK  ; GET PRIV MASK ADDRESS
                    0056    205              MODE    FROM,5$ ; BACK TO USER MODE
                    0057    206              PRIV    ADD,ALL                     ; GET ALL PRIVILEGES
```

```
                                    0077   207          $SETPRN_S TEST_MOD_NAME_D          ; SET PROCESS NAME
                                    0084   208          SS_CHECK NORMAL                    ; CHECK STATUS CODE RETURNED FROM SETPRN
                                    00B2   209          $WAKE_S SELFPID                    ; GET MY PID
                                    00C1   210          SS_CHECK NORMAL                    ; CHECK FOR NORMAL RETURN
                                    00EF   211          $HIBER_S                           ; UNDO ABOVE WAKE
                                    00F6   212          SS_CHECK NORMAL                    ; CHECK FOR NORMAL RETURN
                                    0124   213  ;
                                    0124   214  ; THE FOLLOWING CODE ESTABLISHES UIC'S IN THE CONDITION 3 TABLE
                                    0124   215  ;
                                    0124   216          MODE    TO,20$,KRNL               ; KERNEL MODE TO ACCESS PCB
       59    00000000'9F    D0      0147   217          MOVL    @#SCH$GL_CURPCB,R9         ; GET CURRENT PCB ADDRESS
             59    00BC C9   D0     014E   218          MOVL    PCB$L_UIC(R9),R9          ; PICK UP UIC FROM PCB
                                    0153   219          MODE    FROM,20$                  ; ... AND GET BACK TO USER MODE
                                    0154   220  ;
                                    0154   221  ; R9 NOW CONTAINS "MY" UIC
                                    0154   222  ;
            5A    02    9A          0154   223          MOVZBL  #2,R10                     ; GET COND3 TABLE INDEX NUMBER INTO A REG
       59    00010000 8F    C1      0157   224          ADDL3   #^X10000,R9,COND3_E[R10]  ; PUT DIFF GROUP UIC INTO 3RD TABLE ELT
       0000024F'EF4A                015E
            5A          D6          0164   225          INCL    R10                        ; POINT TO 4TH COND3 TABLE ELEMENT
  0000024F'EF4A   59    D0          0166   226          MOVL    R9,COND3_E[R10]            ; PUT MY UIC INTO TABLE
            5A          D6          016E   227          INCL    R10                        ; POINT TO 5TH COND3 TABLE ELEMENT
  0000024F'EF4A   59    01    C1    0170   228          ADDL3   #1,R9,COND3_E[R10]         ; PUT DIFF MEMBER UIC INTO THE TABLE
                                    0179   229          $CREMBX_S CHAN=MBXCHAN, LOGNAM=SUBJPRN, - ; GET MAILBOX FOR PROCESS
                                    0179   230              MAXMSG=#120, PROMSK=#0, BUFQUO=#240
                                    019E   231          SS_CHECK NORMAL                    ; CHECK NORMAL COMPLETION
                                    01CC   232          $GETCHN_S CHAN=MBXCHAN, -          ; GET CHAN INFO (UNIT NUMBER)
                                    01CC   233              PRIBUF=MBXCHANINFO
                                    01E6   234          SS_CHECK NORMAL                    ; CHECK NORMAL COMPLETION
  00000088'EF   00000020'EF   3C    0214   235          MOVZWL  MBXCHANINFO+8+DIB$W_UNIT,MBXUNIT ; SAVE MAILBOX UNIT NUMBER
                          05        021F   236          RSB                                ; RETURN TO MAIN ROUTINE
                                    0220   237  TM_CLEANUP::
                                    0220   238          $DELMBX_S  MBXCHAN                 ; DELETE TERMINATION MAILBOX
                   FDCF'   30       022E   239          BSBW    MOD_MSG_PRINT             ; PRINT TEST MODULE END MSG
                          05        0231   240          RSB                                ; RETURN TO MAIN ROUTINE
```

```
          0232  242            .s@ttl  CONDITION SUBROUTINES - SETUP AND CLEANUP
          0232  243    ;++
          0232  244    ; FUNCTIONAL DESCRIPTION:
          0232  245    ;
          0232  246    ;              CONDX AND CONDX CLEANUP ARE SUBROUTINES WHICH ARE EXECUTED
          0232  247    ; BEFORE AND AFTER THE VERIFY SUBROUTINE, RESPECTIVELY, WHENEVER A NEW
          0232  248    ; CONDITION X VALUE IS SELECTED (SEE FUNCTIONAL DESCRIPTION OF SUCCOMMON
          0232  249    ; ROUTINE IN SUCCOMMON.MAR). ANY SETUP FUNCTION PARTICULAR TO THE
          0232  250    ; CONDITION X TABLE IS INCLUDED IN THE CONDX SUBROUTINE AND CLEANED
          0232  251    ; UP, IF NECESSARY, IN THE CONDX CLEANUP SUBROUTINE. THIS INCLUDES,
          0232  252    ; ESPECIALLY, CODE TO DETECT CONFLICTS AMONG CURRENT ENTRIES IN TWO
          0232  253    ; OR MORE CONDITION TABLES. IF A CONFLICT IS DETECTED, A NON-ZERO
          0232  254    ; VALUE IS STORED INTO CONFLICT, WHICH CAUSES THE CALLING ROUTINE
          0232  255    ; (SUCCOMMON) TO SKIP THE CURRENT ENTRY IN THE CONDITION X TABLE.
          0232  256    ;
          0232  257    ; CALLING SEQUENCE:
          0232  258    ;
          0232  259    ;     BSBW CONDX   BSBW CONDX_CLEANUP
          0232  260    ;       WHERE X = 1,2,3,4,5
          0232  261    ;
          0232  262    ; INPUT PARAMETERS:
          0232  263    ;
          0232  264    ;     CONFLICT = 0
          0232  265    ;
          0232  266    ; IMPLICIT INPUTS:
          0232  267    ;
          0232  268    ;     R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
          0232  269    ;       FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
          0232  270    ;
          0232  271    ; OUTPUT PARAMETERS:
          0232  272    ;
          0232  273    ;     CONFLICT SET TO NON-ZERO IF COND TABLE CONFLICT DETECTED.
          0232  274    ;
          0232  275    ; IMPLICIT OUTPUTS:
          0232  276    ;
          0232  277    ;     R2,3,4,5,6 PRESERVED
          0232  278    ;
          0232  279    ; COMPLETION CODES:
          0232  280    ;
          0232  281    ;     NONE
          0232  282    ;
          0232  283    ; SIDE EFFECTS:
          0232  284    ;
          0232  285    ;     NONE
          0232  286    ;
          0232  287    ;--
          0232  288
          0232  289
          0232  290
          0232  291    COND1::
    05    0232  292            RSB                             ; RETURN TO MAIN ROUTINE
    05    0233  293    COND1_CLEANUP::
          0233  294            RSB                             ; RETURN TO MAIN ROUTINE
    05    0234  295    COND2::
    05    0234  296            RSB                             ; RETURN TO MAIN ROUTINE
          0235  297    COND2_CLEANUP::
    05    0235  298            RSB                             ; RETURN TO MAIN ROUTINE
```

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SATSSS45   SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25 VAX/VMS Macro V04-00   Page   9
V04-000   CONDITION SUBROUTINES - SETUP AND CLEANU 5-SEP-1984 04:31:42 [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
00000170'EF42   0000011C'8F   D1  0236  299 COND3::
                         20   13  0242  300         CMPL    #SUBJPID,COND1_E[R2]    ; NON-ZERO PID SPECIFIED ?
              000001B2'EF43   D5  0244  301         BEQLU   10$                     ; YES -- PROCESS IS 'OTHER'
                         07   13  024B  302         TSTL    COND2_E[R3]             ; IS PROCESS NAME SPECIFIED ?
                      02 54   D1  024D  303         BEQL    5$                      ; NO -- SUBJECT PROCESS IS 'SELF'
                         20   13  0250  304         CMPL    R4,#2                   ; DOES CONDITION 3 SPECIFY DIFFERENT GROUP ?
                         10   11  0252  305         BEQL    20$                     ; YES -- PROCESS NAME FOR DIFF GROUP IS CONF
                              0254  306         BRB     10$                     ; NO -- MAKE SURE COND 3 SPECIFIES 'OTHER'
                              0254  307 5$:
                              0254  308 ;
                              0254  309 ; PROCESS IS "SELF"
                              0254  310 ;
0000024F'EF44   00000000'EF   D1  0254  311         CMPL    ONES,COND3_E[R4]        ; DOES CONDITION 3 SPECIFY "SELF" ?
                         1B   13  0260  312         BEQLU   COND3X                  ; YES -- THEN ALL 3 CONDIT'NS ARE CONSISTENT
                         0E   11  0262  313         BRB     20$                     ; NO -- INDICATE CONFLICT & GET OUT
                              0264  314 10$:
                              0264  315 ;
                              0264  316 ; PROCESS IS "OTHER"
                              0264  317 ;
0000024F'EF44   00000000'EF   D1  0264  318         CMPL    ONES,COND3_E[R4]        ; DOES CONDITION 3 SPECIFY "SELF" ?
                         0B   12  0270  319         BNEQU   COND3X                  ; NO -- THEN ALL 3 CONDITIONS ARE CONSISTENT
                              0272  320 20$:
  00000000'EF   00000000'EF   90  0272  321         MOVB    ONES,CONFLICT           ; YES -- INDICATE CONFLICT
                         05   027D  322 COND3X:
                         05   027D  323         RSB                                 ; RETURN TO MAIN ROUTINE
                              027E  324 COND3_CLEANUP::
                         05   027E  325         RSB                                 ; RETURN TO MAIN ROUTINE
                              027F  326 COND4::
                         05   027F  327         RSB                                 ; RETURN TO MAIN ROUTINE
                              0280  328 COND4_CLEANUP::
                         05   0280  329         RSB                                 ; RETURN TO MAIN ROUTINE
                              0281  330 COND5::
                         05   0281  331         RSB                                 ; RETURN TO MAIN ROUTINE
                              0282  332 COND5_CLEANUP::
                         05   0282  333         RSB                                 ; RETURN TO MAIN ROUTINE
```

SATSSS45
V04-000

H 10
SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25 VAX/VMS Macro V04-00   Page 10
FORM_CONDS   5-SEP-1984 04:31:42 [UETPSY.SRC]SATSSS45.MAR;1   (1)

```
                                    0283   335              .SBTTL  FORM_CONDS
                                    0283   336   ;++
                                    0283   337   ; FUNCTIONAL DESCRIPTION:
                                    0283   338   ;
                                    0283   339   ;             FORM_CONDS FORMATS AND PRINTS INFORMATION ABOUT
                                    0283   340   ; THE CURRENT ELEMENT IN EACH OF THE CONDITION TABLES.
                                    0283   341   ;
                                    0283   342   ; CALLING SEQUENCE:
                                    0283   343   ;
                                    0283   344   ;     BSBW FORM_CONDS
                                    0283   345   ;
                                    0283   346   ; INPUT PARAMETERS:
                                    0283   347   ;
                                    0283   348   ;     NONE
                                    0283   349   ;
                                    0283   350   ; IMPLICIT INPUTS:
                                    0283   351   ;
                                    0283   352   ;     R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                                    0283   353   ;       FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                                    0283   354   ;     FOR X = 1,2,3,4,5 :
                                    0283   355   ;             CONDX_T - TITLE TEXT FOR CONDX TABLE
                                    0283   356   ;             CONDX_TAB - ELEMENT TEXT FOR CONDX TABLE
                                    0283   357   ;             CONDX_C - CONTEXT OF THE CONDX TABLE
                                    0283   358   ;             CONDX_E - DATA ELEMENTS OF THE CONDX TABLE
                                    0283   359   ;
                                    0283   360   ; OUTPUT PARAMETERS:
                                    0283   361   ;
                                    0283   362   ;     NONE
                                    0283   363   ;
                                    0283   364   ; IMPLICIT OUTPUTS:
                                    0283   365   ;
                                    0283   366   ;     NONE
                                    0283   367   ;
                                    0283   368   ; COMPLETION CODES:
                                    0283   369   ;
                                    0283   370   ;     NONE
                                    0283   371   ;
                                    0283   372   ; SIDE EFFECTS:
                                    0283   373   ;
                                    0283   374   ;     NONE
                                    0283   375   ;
                                    0283   376   ;--
                                    0283   377
                                    0283   378
                                    0283   379
                                    0283   380   FORM_CONDS::
                                    0283   381          $FAO_S  MSG1_INP_CTL,FAO_LEN,FAO_DESC,TESTNUM
                                    02A2   382                                          ; FORMAT CONDITIONS HEADER MSG
                        FD5B'  30   02A5   383          BSBW    OUTPUT_MSG              ; ... AND PRINT IT
                     14  00  91    12   02A8   384          CMPB    #COND1_C,#NULL          ; IS CONDITION 1 NULL ?
                            03  12   02A8   385          BNEQU   10$                     ; NO -- CONTINUE
                        00BF  31   02AA   386          BRW     FORM_CONDSX             ; YES -- SUBROUTINE IS FINISHED
                                    02AD   387   10$:
00000000'EF   00000125'EF  DE   02AD   388          MOVAL   COND1_T,MSG_A           ; SAVE ADDRESS OF CONDITION 1 TITLE FOR FAO
00000000'EF   00000132'EF42  D0   02B8   389          MOVL    COND1_TAB[R2],MSG_B     ; SAVE ADDR OF COND 1 CURR TEXT ELT FOR FAO
          00000000'EF   00  90   02C4   390          MOVB    #CONDT_C,MSG_CTXT       ; SAVE CONDITION 1 CONTEXT FOR FAO
                                    02CB   391          MOV_VAL COND1_C,CONDT_E[R2],MSG_DATA1 ; GIVE COND 1 DATA VALUE TO FAO
```

```
                      FD32'   30  02CB    392            BSBW    WRITE_MSG2               ; FORMAT AND WRITE CONDITION 1 MSG
                  14   00   91  02CE    393            CMPB    #COND2_C,#NULL           ; IS CONDITION 2 NULL ?
                       03   12  02D1    394            BNEQU   20$                      ; NO -- CONTINUE
                     0096   31  02D3    395            BRW     FORM_CONDSX              ; YES -- SUBROUTINE IS FINISHED
                            02D6    396    20$:
  00000000'EF   0000017C'EF   DE  02D6    397            MOVAL   COND2_T,MSG_A            ; SAVE ADDRESS OF CONDITION 2 TITLE FOR FAO
  00000000'EF   00000192'EF43 D0  02E1    398            MOVL    COND2_TAB[R3],MSG_B      ; SAVE ADDR OF COND 2 CURR TEXT ELT FOR FAO
         00000000'EF   00   90  02ED    399            MOVB    #COND2_C,MSG_CTXT        ; SAVE CONDITION 2 CONTEXT FOR FAO
                            02F4    400            MOV_VAL COND2_T,COND2_E[R3],MSG_DATA1 ; GIVE COND 2 DATA VALUE TO FAO
                      FD09'   30  02F4    401            BSBQ    WRITE_MSG2               ; FORMAT AND WRITE CONDITION 2 MSG
                  14   00   91  02F7    402            CMPB    #COND3_C,#NULL           ; IS CONDITION 3 NULL ?
                       03   12  02FA    403            BNEQU   30$                      ; NO -- CONTINUE
                     006D   31  02FC    404            BRW     FORM_CONDSX              ; YES -- SUBROUTINE IS FINISHED
                            02FF    405    30$:
  00000000'EF   000001BA'EF   DE  02FF    406            MOVAL   COND3_T,MSG_A            ; SAVE ADDRESS OF CONDITION 3 TITLE FOR FAO
  00000000'EF   000001C8'EF44 D0  030A    407            MOVL    COND3_TAB[R4],MSG_B      ; SAVE ADDR OF COND 3 CURR TEXT ELT FOR FAO
         00000000'EF   00   90  0316    408            MOVB    #COND3_C,MSG_CTXT        ; SAVE CONDITION 3 CONTEXT FOR FAO
                            031D    409            MOV_VAL COND3_T,COND3_E[R4],MSG_DATA1 ; GIVE COND 3 DATA VALUE TO FAO
                      FCE0'   30  031D    410            BSBQ    WRITE_MSG2               ; FORMAT AND WRITE CONDITION 3 MSG
                  14   14   91  0320    411            CMPB    #COND4_C,#NULL           ; IS CONDITION 4 NULL ?
                       47   13  0323    412            BEQLU   FORM_CONDSX              ; YES -- SUBROUTINE IS FINISHED
  00000000'EF   00000263'EF   DE  0325    413            MOVAL   COND4_T,MSG_A            ; SAVE ADDRESS OF CONDITION 4 TITLE FOR FAO
  00000000'EF   00000263'EF45 D0  0330    414            MOVL    COND4_TAB[R5],MSG_B      ; SAVE ADDR OF COND 4 CURR TEXT ELT FOR FAO
         00000000'EF   14   90  033C    415            MOVB    #COND4_C,MSG_CTXT        ; SAVE CONDITION 4 CONTEXT FOR FAO
                            0343    416            MOV_VAL COND4_T,COND4_E[R5],MSG_DATA1 ; GIVE COND 4 DATA VALUE TO FAO
                      FCBA'   30  0343    417            BSBQ    WRITE_MSG2               ; FORMAT AND WRITE CONDITION 4 MSG
                  14   14   91  0346    418            CMPB    #COND5_C,#NULL           ; IS CONDITION 5 NULL ?
                       21   13  0349    419            BEQLU   FORM_CONDSX              ; YES -- SUBROUTINE IS FINISHED
  00000000'EF   00000264'EF   DE  034B    420            MOVAL   COND5_T,MSG_A            ; SAVE ADDRESS OF CONDITION 5 TITLE FOR FAO
  00000000'EF   00000264'EF46 D0  0356    421            MOVL    COND5_TAB[R6],MSG_B      ; SAVE ADDR OF COND 5 CURR TEXT ELT FOR FAO
         00000000'EF   14   90  0362    422            MOVB    #COND5_C,MSG_CTXT        ; SAVE CONDITION 5 CONTEXT FOR FAO
                            0369    423            MOV_VAL COND5_T,COND5_E[R6],MSG_DATA1 ; GIVE COND 5 DATA VALUE TO FAO
                      FC94'   30  0369    424            BSBQ    WRITE_MSG2               ; FORMAT AND WRITE CONDITION 5 MSG
                            036C    425    FORM_CONDSX:
                       05  036C    426            RSB                              ; RETURN TO CALLER
```

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036D    428              .SBTTL  VERIFY
036D    429  ;++
036D    430  ; FUNCTIONAL DESCRIPTION:
036D    431  ;
036D    432  ;         VERIFY IS CALLED ONCE FOR EACH COMBINATION OF CONDITION
036D    433  ; TABLE VALUES (AS DETERMINED BY THE INDEX REGISTERS R2,3,4,5,6 FOR
036D    434  ; COND TABLES 1,2,3,4,5, RESPECTIVELY). VERIFY ESTABLISHES THE CONDITIONS
036D    435  ; SPECIFIED BY THE COND TABLES AND ISSUES THE SUBJECT SYSTEM SERVICE
036D    436  ; ($SETPRI). THEN, THE SUCCESSFUL OPERATION OF THE SERVICE IS VERIFIED
036D    437  ; BY EXAMINING THE STATUS CODE RETURNED, THE VALUES FOR RETURN ARGUMENTS
036D    438  ; AND THE FUNCTIONALITY PERFORMED. THE EXAMINATIONS TAKE THE FORM OF
036D    439  ; COMPARISONS AGAINST EXPECTED VALUES. ANY FAILING COMPARISON CAUSES AN
036D    440  ; ERR_EXIT MACRO TO BE EXECUTED (EITHER DIRECTLY, OR INDIRECTLY,
036D    441  ; THROUGH THE SS_CHECK MACRO); ERR_EXIT SETS EFLAG TO NON-ZERO,
036D    442  ; PRINTS ERROR MESSAGES AND CAUSES AN IMMEDIATE RSB TO CALLER.
036D    443  ; WHEN ERR_EXIT IS EXECUTED, FURTHER CALLS TO VERIFY ARE SUPPRESSED,
036D    444  ; AND, AFTER EXECUTING CLEANUP SUBROUTINES, THE IMAGE EXITS.
036D    445  ;
036D    446  ; CALLING SEQUENCE:
036D    447  ;
036D    448  ;     BSBW VERIFY
036D    449  ;
036D    450  ; INPUT PARAMETERS:
036D    451  ;
036D    452  ;     NONE
036D    453  ;
036D    454  ; IMPLICIT INPUTS:
036D    455  ;
036D    456  ;     R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
036D    457  ;        FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
036D    458  ;     FOR X = 1,2,3,4,5 :
036D    459  ;            CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
036D    460  ;               TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
036D    461  ;               ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
036D    462  ;               FOR CONDX_E.
036D    463  ;
036D    464  ; OUTPUT PARAMETERS:
036D    465  ;
036D    466  ;     NONE
036D    467  ;
036D    468  ; IMPLICIT OUTPUTS:
036D    469  ;
036D    470  ;     VERIFY HAS NO OUTPUT. SINCE ITS PURPOSE IS TO TEST FOR ERRORS,
036D    471  ;     IT MERELY RETURNS TO CALLER NORMALLY AFTER THE TESTS, PROVIDING
036D    472  ;     ALL WERE SUCCESSFUL; IF AN ERROR IS DISCOVERED, RETURN IS VIA
036D    473  ;     AN ERR_EXIT OR SS_CHECK MACRO, BOTH OF WHICH DOCUMENT DETECTED
036D    474  ;     ERRORS.
036D    475  ;
036D    476  ; COMPLETION CODES:
036D    477  ;
036D    478  ;     EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
036D    479  ;
036D    480  ; SIDE EFFECTS:
036D    481  ;
036D    482  ;     SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
036D    483  ;     (VIA RSB) IF ERROR ENCOUNTERED.
036D    484  ;
```

SATSSS45   SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25 VAX/VMS Macro V04-00   Page 13
V04-000   VERIFY   5-SEP-1984 04:31:42 [UETPSY.SRC]SATSSS45.MAR;1   (1)

K 10

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                                       036D    485  ;--
                                       036D    486
                                       036D    487
                                       036D    488
                                       036D    489  VERIFY::
                   00000000'EF    95   036D    490        TSTB    CFLAG               ; SHOULD CONDITIONS BE PRINTED ?
                            03    13   0373    491        BEQL    5$                  ; NO -- CONTINUE
                          FF0B    30   0375    492        BSBW    FORM_CONDS          ; YES -- FMT & PRINT ALL CONDS FOR THIS T.C.
                                       0378    493  5$:
   0000011C'EF    00000114'EF    D0    0378    494        MOVL    SELFPID,SUBJPID     ; ASSUME THE SUBJECT PID IS SELF
                   00000110'EF    D4    0383    495        CLRL    ZEROPID             ; CLEAR ZERO PID
   0000024F'EF44  00000000'EF    D1    0389    496        CMPL    ONES,COND3_E[R4]    ; IS PROCESS FOR THIS TEST CASE SELF ?
                            03    12    0395    497        BNEQU   7$                  ; NO -- CONTINUE
                          0074    31    0397    498        BRW     10$                 ; YES -- DON'T CREATE A PROCESS
                                       039A    499  7$:
                                       039A    500        $CREPRC_S PIDADR=CREPID, PRCNAM=SUBJPRN, -
                                       039A    501                  UIC=COND3_E[R4], IMAGE=IMAGNAM, -
                                       039A    502                  MBXUNT=MBXUNIT, QUOTA=QUOTALIST
                                       03D5    503                                    ; CREATE THE SUBJECT PROCESS
                                       03D5    504        SS_CHECK NORMAL             ; ... AND MAKE SURE IT CREATED OK
   0000011C'EF    00000118'EF    D0    0403    505        MOVL    CREPID,SUBJPID      ; MAKE THE SUBJCT PID = THE ONE JUST CREATED
                                       040E    506  10$:
                                       040E    507        $SETPRI_S PIDADR=SUBJPID, PRI=#0, -
                                       040E    508                  PRVPRI=ORIGPRI    ; GET ORIGINAL PRIORITY
                                       0425    509        SS_CHECK  NORMAL            ; CHECK FOR NORMAL RETURN
                                       0453    510        $SETPRI_S PIDADR=SUBJPID, PRI=ORIGPRI ; RESTORE ORIGINAL PRIORITY
                                       046A    511        SS_CHECK NORMAL             ; CHECK FOR NORMAL RETURN
   0000010C'EF    00000170'EF42  D0    049B    512        MOVL    COND1_E[R2],DEST_PIDADR ; GET PID ADDRESS OUT OF TABLE
            59    000001B2'EF43  D0    04A4    513        MOVL    COND2_E[R3],R9      ; PRCNAM ADDR INTO REG FOR INDIRECT REF'RNCE
                            58    D4    04AC    514        CLRL    R8                  ; INITIALIZE PRIORITY VALUE REGISTER
                                       04AE    515  15$:
                   00000110'EF    D4    04AE    516        CLRL    ZEROPID             ; ENSURE ZEROPID IS STILL ZERO
                                       04B4    517  ;
                                       04B4    518  ; ****** SYSTEM SERVICE CALL WHICH IS THE SUBJECT OF THIS TEST CASE ******
                                       04B4    519  ;
                                       04B4    520        $SETPRI_S PIDADR=@DEST_PIDADR, PRCNAM=(R9), -
                                       04B4    521                  PRI=R8, PRVPRI=ESTPRI
            00000000'8F    50    D1    04CB    522        CMPL    R0,#SS$_NORMAL      ; CODE RECEIVED = CODE EXPECTED ?
                            61    13    04D2    523        BEQLU   18$                 ; YES -- CONTINUE
   00000000'EF    00000000'8F    D0    04D4    524        MOVL    #SS$_NORMAL,EXPV    ; NO -- LOAD UP EXPECTED AND ...
   00000000'EF            50    D0    04DF    525        MOVL    R0,RECV             ; ... RECEIVED VALUES, THEN EXIT
                                       04E6    526        ERR_EXIT LONG,<INCORRECT STATUS CODE RETURNED FROM SETPRI>
                                       0535    527  18$:
                   0000010C'EF    D5    0535    528        TSTL    DEST_PIDADR         ; PID RETURNED BY SETPRI ?
                            68    13    053B    529        BEQL    20$                 ; NO -- KEEP GOING
   0000010C'FF    0000011C'EF    D1    053D    530        CMPL    SUBJPID,@DEST_PIDADR ; YES -- IS IT THE CORRECT ONE ?
                            5B    13    0548    531        BEQL    20$                 ; YES -- CONTINUE
   00000000'EF    0000011C'EF    D0    054A    532        MOVL    SUBJPID,EXPV        ; NO --LOAD UP EXPECTED AND
   00000000'EF    0000010C'FF    D0    0555    533        MOVL    @DEST_PIDADR,RECV   ; ... RECEIVED VALUES, THEN EXIT
                                       0560    534        ERR_EXIT LONG,<INCORRECT PID RETURNED BY SETPRI>
                                       05A5    535  20$:
                            58    D5    05A5    536        TSTL    R8                  ; SETTING PRIORITY 0 ?
                            09    12    05A7    537        BNEQ    40$                 ; NO -- CONTINUE
     5A    00000120'EF    90    05A9    538        MOVB    ORIGPRI,R10         ; YES -- EXPECT ORIGINAL PRIORITY RETURNED
                            04    11    05B0    539        BRB     42$                 ; .......
                                       05B2    540  40$:
        5A    58    01    83    05B2    541        SUBB3   #1,R8,R10           ; COMPUTE EXPECTED PRIORITY TO BE RETURNED
```

```
              00000124'EF    5A   91   05B6   542 42$:
                             5C   13   05BD   543          CMPB    R10,ESTPRI               ; IS ESTABLISHED PRIORITY = THAT EXPECTED ?
              00000000'EF    5A   90   05BF   544          BEQLU   50$                      ; YES -- CONTINUE
  00000000'EF   00000124'EF      90   05C6   545          MOVB    R10,EXPV                 ; NO -- LOAD UP EXPECTED AND
                                       05D1   546          MOVB    ESTPRI,RECV              ; ... RECEIVED VALUES, THEN EXIT
                                       061B   547          ERR_EXIT BYTE,<PRIORITY VALUE NOT RETAINED BY SETPRI>
                                       061B   548 50$:
       FE8D 58   01   1F    9D   061B   549          ACBB    #31,#1,R8,15$            ; LOOP THRU ALL LEGAL PRIORITIES
                                       0621   550          $SETPRI_S PIDADR=SUBJPID, PRI=ORIGPRI, -
                                       0621   551                  PRVPRI=ESTPRI           ; GET BACK ORIGINAL PRIORITY
                                       063C   552          SS_CHECK NORMAL                 ; CHECK FOR NORMAL RETURN
              C0000124'EF    1F   91   066A   553          CMPB    #31,ESTPRI              ; DID SETPRI REMEMBER PREVIOUS PRI (31) ?
                             5C   13   0671   554          BEQLU   60$                      ; YES -- CONTINUE
              00000000'EF    1F   90   0673   555          MOVB    #31,EXPV                 ; NO -- LOAD UP EXPECTED AND
  00000000'EF   00000124'EF      90   067A   556          MOVB    ESTPRI,RECV              ; ... RECEIVED VALUES, THEN EXIT
                                       0685   557          ERR_EXIT BYTE,<PRIORITY VALUE NOT RETAINED BY SETPRI>
                                       06CF   558 60$:
  0000011C'EF   00000118'EF   D1   06CF   559          CMPL    CREPID,SUBJPID           ; WAS A PROCESS CREATED ?
                             03   13   06DA   560          BEQLU   65$                      ; YES -- CONTINUE
                           0094   31   06DC   561          BRW     VERIFYX                  ; NO -- ALL FINISHED
                                       06DF   562 65$:
                                       06DF   563          $WAKE_S SUBJPID                 ; ALLOW CREATED PROCESS TO FINISH
                                       06EE   564          SS_CHECK NORMAL                 ; CHECK FOR NORMAL STATUS CODE
                                       071C   565          $QIOW_S CHAN=MBXCHAN, FUNC=#IO$_READVBLK, -
                                       071C   566                  P1=MBXBUFF+8, P2=MBXBUFF
                                       0745   567                                          ; ... AND  WAIT FOR IT TO SEND MAIL
                                       0745   568          SS_CHECK NORMAL                 ; CHECK FOR NORMAL STATUS CODE
                                       0773   569 VERIFYX:
                             05   0773   570          RSB                              ; RETURN TO CALLER
```

```
                                 0774   572          .SBTTL  VFY_CLEANUP
                                 0774   573   ;++
                                 0774   574   ; FUNCTIONAL DESCRIPTION:
                                 0774   575   ;
                                 0774   576   ;        VFY_CLEANUP EXECUTES SYSTEM SERVICES TO UNDO THE
                                 0774   577   ; EFFECT OF THOSE ISSUED IN THE VERIFY SUBROUTINE. VFY_CLEANUP MUST
                                 0774   578   ; ASSUME THAT VERIFY MAY NOT HAVE EXECUTED IN ITS ENTIRETY (IF AN
                                 0774   579   ; ERROR IS FOUND). ALSO, VFY_CLEANUP MAY ISSUE SS_CHECK OR ERR_EXIT
                                 0774   580   ; ONLY AFTER PERFORMING ALL OF ITS CLEANUP OPERATIONS; THIS IS REQUIRED
                                 0774   581   ; IN THE EVENT THAT VFY_CLEANUP IS CALLED DURING ERROR PROCESSING,
                                 0774   582   ; WHEN PERFORMING THE REQUIRED CLEANUP IS MORE IMPORTANT THAN
                                 0774   583   ; POSSIBLY DISCOVERING A SECOND ERROR.
                                 0774   584   ;
                                 0774   585   ; CALLING SEQUENCE:
                                 0774   586   ;
                                 0774   587   ;     BSBW VFY_CLEANUP
                                 0774   588   ;
                                 0774   589   ; INPUT PARAMETERS:
                                 0774   590   ;
                                 0774   591   ;     NONE
                                 0774   592   ;
                                 0774   593   ; IMPLICIT INPUTS:
                                 0774   594   ;
                                 0774   595   ;     R2,3,4,5,6 CONTAIN CURRENT CONDITION TABLE INDEX VALUES
                                 0774   596   ;        FOR COND TABLES 1,2,3,4,5, RESPECTIVELY.
                                 0774   597   ;     FOR X = 1,2,3,4,5 :
                                 0774   598   ;           CONDX_E - ADDRESS OF TABLE OF DATA VALUES FOR CONDX
                                 0774   599   ;           TABLE. IF THE CONTEXT OF TABLE X IS A SYSTEM SERVICE
                                 0774   600   ;           ARGUMENT, THE ARGUMENT NAME MAY BE USED AS A SYNONYM
                                 0774   601   ;           FOR CONDX_E.
                                 0774   602   ;
                                 0774   603   ; OUTPUT PARAMETERS:
                                 0774   604   ;
                                 0774   605   ;     NONE
                                 0774   606   ;
                                 0774   607   ; IMPLICIT OUTPUTS:
                                 0774   608   ;
                                 0774   609   ;     NONE
                                 0774   610   ;
                                 0774   611   ; COMPLETION CODES:
                                 0774   612   ;
                                 0774   613   ;     EFLAG SET TO NON-ZERO IF ERROR ENCOUNTERED.
                                 0774   614   ;
                                 0774   615   ; SIDE EFFECTS:
                                 0774   616   ;
                                 0774   617   ;     SS_CHECK AND ERR_EXIT MACROS CAUSE PREMATURE EXIT
                                 0774   618   ;     (VIA RSB) IF ERROR ENCOUNTERED.
                                 0774   619   ;
                                 0774   620   ;--
                                 0774   621
                                 0774   622
                                 0774   623
                                 0774   624   VFY_CLEANUP::
0000011C'EF   00000118'EF  D1    0774   625          CMPL    CREPID,SUBJPID       ; WAS A PROCESS CREATED FOR THIS TEST CASE ?
                 11     12        077F   626          BNEQU   10$                  ; NO -- DON'T DELETE IT
                                  0781   627          $DELPRC_S SUBJPID            ; YES -- DELETE IT
                 52     11        0790   628          BRB     VFY_CLEANUPX         ; ... AND GET OUT
```

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SATSSS45   SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25 VAX/VMS Macro V04-00   Page 16
V04-000   VFY_CLEANUP   5-SEP-1984 04:31:42 [UETPSV.SRC]SATSSS45.MAR:1   (1)

```
                                  0792     629 10$:
   00000120'EF    00000000'EF  91 0792     630            CMPB    ONES,ORIGPRI                  ; WAS ORIGINAL PRIORITY EVER CHANGED ?
                            45 13 079D     631            BEQLU   VFY_CLEANUPX                  ; NO -- CLEANUP IS COMPLETE
                                  079F     632            $SETPRI_S PIDADR=SUBJPID, PRI=ORIGPRI ; YES -- GET BACK ORIGINAL
                                  07B6     633            $S_CHECK NORMAL                       ; CHECK FOR NORMAL RETURN
                                  07E4     634 VFY_CLEANUPX:
   00000120'EF    00000000'EF  90 07E4     635            MOVB    ONES,ORIGPRI                  ; INDICATE PRI NOT CHANGED YET FOR NEXT T.C.
                            05    07EF     636            RSB                                  ; RETURN TO CALLER
                                  07F0     637            .END
```

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SATSSS45   SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25   VAX/VMS Macro V04-00   Page 17
Symbol table   5-SEP-1984 04:31:42   [UETPSY.SRC]SATSSS45.MAR;1   (1)

$$$$	= 0000068F R	04	DIB$W_UNIT	= 0000000C		
$$$CHARS	= 00000025		EFLAG	******** X	04	
$$$CHARS1	= 00000004		ESTPRI	00000124 R	03	
$$$CHARS2	= 0000000A		EXPV	******** X	04	
$$$CHARS3	= 00000019		FAO_DESC	******** X	04	
$$$CHARS4	= 00000021		FAO_LEN	******** X	04	
$$$CHARS5	= 00000026		FORM_CONDS	00000283 RG	04	
$$$COND_A	= 00000004		FORM_CONDSX	0000036C R	04	
$$$STRINGS	= 00000001		IMAGRAM	00000065 R	02	
$$$STRINGS2	= 00000005		IO$_READVBLK	******** X	04	
$$T1	= 00000001		LONG	= 00000004 G		
$$T2	= 00000004		MBXBUFF	0000008C R	03	
BYTE	= 00000001 G		MBXCHAN	00000008 R	03	
CFLAG	******** X	04	MBXCHANINFO	0000000C R	03	
CHMRTN	******** X	04	MBXUNIT	00000088 R	03	
CHM_CONT	******** X	04	MOD_MSG_CODE	******** X	04	
COMP_SC	******** X	04	MOD_MSG_PRINT	******** X	04	
CONDT	00000232 RG	04	MSGT_INP_CTL	00000019 R	02	
COND1_C	= 00000000		MSG3_ERR_CTL	00000039 RG	02	
COND1_CLEANUP	00000233 RG	04	MSG_A	******** X	04	
COND1_E	00000170 R	03	MSG_B	******** X	04	
COND1_H	00000131 RG	03	MSG_CTXT	******** X	04	
COND1_T	00000125 R	03	NOTARG	= 00000000 G		
COND1_TAB	00000132 R	03	NULL	= 00000014 G		
COND2	00000234 RG	04	ONES	******** X	04	
COND2_C	= 00000000		ORIGPRI	00000120 R	03	
COND2_CLEANUP	00000235 RG	04	OUTPUT_MSG	******** X	04	
COND2_E	000001B2 R	03	PCB$L_OIC	= 000000BC		
COND2_H	00000191 RG	03	PCV	******** X	04	
COND2_T	0000017C R	03	PHD$Q_PRIVMSK	= 00000000		
COND2_TAB	00000192 R	03	PQL$_BYTLM	= 00000003		
COND3	00000236 RG	04	PQL$_CPULM	= 00000004		
COND3X	0000027D R	04	PQL$_FILLM	= 00000006		
COND3_C	= 00000000		PQL$_LISTEND	= 00000000		
COND3_CLEANUP	0000027E RG	04	PQL$_PGFLQUOTA	= 00000007		
COND3_E	0000024F R	03	PQL$_PRCLM	= 00000008		
COND3_H	000001C7 RG	03	PQL$_TQELM	= 00000009		
COND3_T	000001BA R	03	PRIVMASK	00000000 R	03	
COND3_TAB	000001C8 R	03	PRIV_ARGS	= 00000002		
COND4	0000027F RG	04	PROCESS_ERR	******** X	04	
COND4_C	= 00000014		QUAD	= 00000008 G		
COND4_CLEANUP	00000280 RG	04	QUOTALIST	00000084 R	02	
COND4_H	00000263 RG	03	RECV	******** X	04	
COND4_T	00000263 R	03	REST_REGS	******** X	04	
COND4_TAB	00000263 R	03	SAVE_REGS	******** X	04	
COND5	00000281 RG	04	SCH$GL_CURPCB	******** X	04	
COND5_C	= 00000014		SELFPID	00000114 R	03	
COND5_CLEANUP	00000282 RG	04	SS$_NORMAL	******** X	04	
COND5_H	00000264 RG	03	SUBJPID	0000011C R	03	
COND5_T	00000264 R	03	SUBJPRN	00000051 R	02	
COND5_TAB	00000264 R	03	SUCCESS	******** X	04	
CONFLICT	******** X	04	SYS$CMKRNL	******** GX	04	
CREPID	00000118 R	03	SYS$CREMBX	******** GX	04	
CTL$GL_PHD	******** X	04	SYS$CREPRC	******** GX	04	
DESC	= 00000010 G		SYS$DELMBX	******** GX	04	
DEST_PIDADR	0000010C R	03	SYS$DELPRC	******** GX	04	
DIB$R_LENGTH	= 00000074		SYS$FAO	******** X	04	

```
SYS$GETCHN                      ******** GX  04
SYS$HIBER                       ******** GX  04
SYS$QIOW                        ******** GX  04
SYS$SETPRI                      ******** GX  04
SYS$SETPRN                      ******** GX  04
SYS$SETPRV                      ******** GX  04
SYS$WAKE                        ******** GX  04
TESTNUM                         ********  X  04
TEST_MOD_NAME                   00000000 RG  02
TEST_MOD_NAME_D                 00000009 R   02
TEST_MOD_SUCC                   ********  X  04
TMD_ADDR                        ********  X  04
TM_CLEANUP                      00000220 RG  04
TM_SETUP                        00000000 RG  04
VERIFY                          0000036D RG  04
VERIFYX                         00000773 R   04
VFY_CLEANUP                     00000774 RG  04
VFY_CLEANUPX                    000007E4 R   04
WORD                          = 00000002  G
WRITE_MSG2                       ********  X  04
ZEROPID                         00000110 R   03
```

```
                              +-----------------+
                              ! Psect synopsis !
                              +-----------------+
```

PSECT name	Allocation		PSECT No.		Attributes											
. ABS .	00000000	(0.)	00	(0.)	NOPIC	USR	CON	ABS	LCL	NOSHR	NOEXE	NORD	NOWRT	NOVEC	BYTE
ABS	00000000	(0.)	01	(1.)	NOPIC	USR	CON	ABS	LCL	NOSHR	EXE	RD	WRT	NOVEC	BYTE
RODATA	0G0000A7	(167.)	02	(2.)	NOPIC	USR	CON	REL	LCL	NOSHR	NOEXE	RD	NOWRT	NOVEC	LONG
RWDATA	00000265	(613.)	03	(3.)	NOPIC	USR	CON	REL	LCL	NOSHR	NOEXE	RD	WRT	NOVEC	LONG
SATSSS45	000007F0	(2032.)	04	(4.)	NOPIC	USR	CON	REL	LCL	NOSHR	EXE	RD	WRT	NOVEC	BYTE

```
                      +-------------------------+
                      ! Performance indicators !
                      +-------------------------+
```

Phase	Page faults	CPU Time	Elapsed Time
Initialization	35	00:00:00.11	00:00:00.33
Command processing	137	00:00:00.66	00:00:01.84
Pass 1	301	00:00:09.60	00:00:19.91
Symbol table sort	0	00:00:00.78	00:00:01.40
Pass 2	139	00:00:02.36	00:00:05.01
Symbol table output	16	00:00:00.11	00:00:00.11
Psect synopsis output	2	00:00:00.03	00:00:00.03
Cross-reference output	0	00:00:00.00	00:00:00.00
Assembler run totals	632	00:00:13.66	00:00:28.63

The working set limit was 1500 pages.
51477 bytes (101 pages) of virtual memory were used to buffer the intermediate code.
There were 30 pages of symbol table space allocated to hold 490 non-local and 60 local symbols.
637 source lines were read in Pass 1, producing 26 object records in Pass 2.
47 pages of virtual memory were used to define 37 macros.

SATSSS45   SATS SYSTEM SERVICE TESTS $SETPRI (SUCC 16-SEP-1984 00:55:25 VAX/VMS Macro V04-00   Page 19
VAX-11 Macro Run Statistics   5-SEP-1984 04:31:42 [UETPSY.SRC]SATSSS45.MAR;1   (1)

                                                  D 11

```
                                        +-------------------------------+
                                        ! Macro library statistics !
                                        +-------------------------------+

Macro library name                              Macros defined
------------------                              --------------
_$255$DUA28:[SHRLIB]UETP.MLB;1                         9
-$255$DUA28:[SYS.OBJ]LIB.MLB;1                         2
~$255$DUA28:[SYSLIB]STARLET.MLB;2                     23
TOTALS (all libraries)                               34
```

892 GETS were required to define 34 macros.

There were no errors, warnings or information messages.

MACRO/LIS=LIS$:SATSSS45/OBJ=OBJ$:SATSSS45 MSRC$:SATSSS45/UPDATE=(ENH$:SATSSS45)+EXECMLS/LIB+SHRLIB$:UETP/LIB